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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,456	06/23/2003	DeQuan Yu	658430600007	9744

7590 02/23/2005
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EXAMINER

TRIEU, THERESA

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,456

Applicant(s)

YU, DEQUAN

Examiner

Theresa Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on December 6, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10,12-14 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 3-9,11 and 15-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Dec. 6, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/12/04, 09/23/04, 08/27/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

This Office Action is responsive to the applicants' amendment filed on December 6, 2004.

The previous indication of allowability of claims 1-24 is hereby withdrawn. An updated search and further review of the prior art of record has prompted the new rejection.

Drawings

The drawings were received on December 6, 2004. These drawings are approved.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 14, 20, 21, 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Robbie (Patent Number 5,299,908).

Regarding claims 1 and 14, as shown in Figs. 1 and 5, Robbie discloses a pump comprising:

a pump housing having an axis and comprising a cover (11) having a face surface and a body (12) having a face surface positioned about the axis, with an arcuate channel (15) defined in the face surface of the cover and an arcuate channel defined in the face surface of the body, the arcuate channels having a length that extends at least partially circumferentially about the axis;

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an inlet opening (13) extending through the cover and coupled to the cover channel;

an outlet opening (14) extending through the body and coupled to the body channel; and

an impeller (5) positioned between the face surface of the cover and the face surface of the body, wherein at least one of the cover channel or the body channel has a cross-sectional shape along at least part of its length that includes a lower section and an upper section, with the lower section having a semi-elliptical, partial semi-elliptical, or partial semi-circular shape (see Figs. 1 and 5), and the upper section having a pair of straight walls (not numbered; however, clearly seen in Figs. 1 and 5) that are coupled to the lower section.

Regarding claims 2, 20, 21, 22 and 24, Robbie discloses both the cover and body channels (11, 12) have a cross-sectional shape along at least part of their lengths that includes a lower section and an upper section, with the lower section having a semi-elliptical, partial semi-elliptical, or partial semi-circular shape, and the upper section having a pair of straight walls that are coupled to the lower section having a bottom with a flattened shape (see Fig. 1); the pair of straight walls of the upper section being perpendicular to the surface of the housing; the pair of straight walls of the upper section being angled relative to the surface of the housing; the housing surface is at least one of a cover or a body of a fuel pump.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. *Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbie in view of Tuckey (Patent Number 5,413,457)*

Robbie discloses the invention as recited above; however, Robbie fails to disclose a transition section between the upper and lower sections of the cover and body channels.

Tuckey teaches that it is conventional in the fuel pump art to utilize a transition section (not numbered; however, clearly seen in Figs. 11-13) between the upper and lower sections of the cover and body channels (136), wherein the transition section includes at least one radius for smoothing the connection between the upper and lower sections (136). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the transition section between upper and lower sections of the cover and body channels, as taught by Tuckey in the Robbie apparatus, since the use of thereof would have improved the performance and the efficiency of the fuel pump device.

3. *Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robbie '908 in view of legal precedent.*

Robbie discloses the invention as recited above; however, Robbie fails to disclose the cover and the body being made of aluminum.

It would have been obvious to one having ordinary skill in the fuel pump art at the time the invention was made, to have utilize the cover and the body being made of aluminum, since it has been held to be within the general skill of a worker in the art to select a known material on

the basis of its suitability for the intended use as a matter of obvious design choice. In re *Leshin*, 125 USPQ 416.

4. *Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robbie '908 in view of legal precedent.*

Robbie discloses the invention as recited above; however, Robbie fails to disclose the cover and body channels are manufactured by casting and machining the cover and body channels. However, where a product by process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an obvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed.Cir. 1983).

Allowable Subject Matter

5. Claims 3-9, 11 and 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

The IDS (PTO-1449) filed on August 27, 2004, September 23, 2004 and October 12, 2004 has been considered. An initialized copy is attached hereto.

Communication


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm. The new telephone number is 571-272-4868 that will become effective after November 22, 2004.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E Denion can be reached on 571-272-4859. The new telephone number is 571-272-4859 that will become effective after November 22, 2004. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT


Theresa Trieu
Primary Examiner
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